Virginia Wildlife

JULY 1969

VOLUME XXX / NUMBER 7

20 CENTS

JOHN W. TAYLOR

Virginia Wildlife

Dedicated to the Conservation of Virginia's Wildlife and Related Natural Resources and to the Betterment of Outdoor Recreation in Virginia

Published by VIRGINIA COMMISSION OF GAME AND INLAND FISHERIES, *Richmond, Virginia 23230*

PUBLICATION OFFICE: Commission of Game and Inland Fisheries, 4010 W. Broad St., Richmond, Virginia

JAMES F. MCINTEER, JR. . . . . *Editor*
ANN E. PILCHER . . . . . *Editorial Assistant*
LEON G. KESTELOO . . . . . *Photographer*
HARRY L. GILLAM . . . . . *Circulation*

JULY

Volume XXX/No. 7

IN THIS ISSUE **PAGE**

COVER: Game birds have been busy since early spring, each female, and in the case of bobwhite quail each pair, intent upon successfully bringing forth and rearing one brood. Artist John W. Taylor, Edgewater, Maryland, has captured the mood of the summer season in his painting adult quail and young.

SUBSCRIPTIONS: One year, $1.50; three years, $3.50. Give check or money order, made payable to the Treasurer of Virginia, to local game commission employee or send to Commission of Game and Inland Fisheries, P. O. Box 11104, Richmond, Virginia 23230.

VIRGINIA WILDLIFE is published monthly at Richmond, Virginia, by the Commission of Game and Inland Fisheries, 4010 W. Broad Street. All magazine subscriptions, change of address notices, and inquiries should be sent to Box 11104, Richmond, Va. 23230. The editorial office gratefully receives for publication news items, articles, photographs, and sketches of good quality which deal with Virginia's soils, water, forests, and wildlife. The Commission assumes no responsibility for unsolicited manuscripts and illustrative material. Credit is given on material published. Permission to reprint text material is granted provided credit is given the Virginia Commission of Game and Inland Fisheries and VIRGINIA WILDLIFE. Clearances must be made with photographers or artists to reproduce illustrations.

Second-class postage paid at Richmond, Va.

GUEST EDITORIAL

Divided We Fail

THE National Wildlife Federation's recent public opinion survey conducted by the Gallup Organization, Inc., produced some very interesting—and disturbing—statistics which deserve further analysis and commentary.

When the public was queried about its greatest environmental concern, only five percent of our citizens expressed any great alarm about the present condition of our nation's wildlife resource. When asked what action should be initiated to perpetuate optimum wildlife populations, the respondents offered these two most often repeated *but erroneous* recommendations:

(1) Provide better law enforcement, and (2) curtail or eliminate hunting.

To wildlife professionals, sportsmen—indeed, all wildlife enthusiasts—such public misconceptions should be viewed with considerable alarm and foreboding. The oft-repeated and hackneyed expression that wildlifers talk only to themselves takes on real meaning in the light of public expressions of this nature.

Scientific wildlife managers have incessantly preached that conserving and preserving *wildlife habitat* is the key to wildlife abundance. But apparently this truism has not even partially filtered through the thought processes of that small percentage of our populace whose primary interest is the continuing well-being of our wildlife resource. The combined educational efforts, hucksterings, and propaganda efforts of government agencies and private conservation organizations have not permeated the public skull with the real cause for plummeting wildlife populations—"the loss of suitable space to live and propagate."

A few months ago a syndicated column appeared in one of our leading newspapers with an attention-getting headline flatly stating most wild animals are headed for extinction by the year 2000. The principal reason given for the accelerating demise of our furred and feathered friends was man's debauchery and selfishness as expressed through the ignominious arts of trapping and hunting. Those who have the audacity to enjoy such outdoor activities were pictured as crude, immoral, and debased characters that history has already tabbed as responsible for the extinction of the passenger pigeon, two species of bison, and the bighorn sheep.

No mention was made of the clear-cut and get-out policy of the timber barons of the 1800's who decimated the Great Lakes' nesting sites of the passenger pigeon. Not one word that well over 90 percent of the American bison range is occupied by tens of millions of beef and dairy cattle, corn and wheat fields crisscrossed with an indeterminable number of barbed wire fences that have made American food production the envy of the world. Most certainly there are still sizable bighorn sheep herds in western states where habitat still remains.

Not one word was written to describe the rescue and restoration of the trumpeter swan from the brink of extinction or that there are now more deer than at any time in our nation's history. Nothing was said about a group of New York hunters who were directly responsible for the designation of our first national park, nor that practically all wildlife protection, research and management is solely financed through tax and license systems largely self-imposed by hunters and fishermen.

(Continued on page 23)

From National Wildlife Federation *Conservation News*, by Thomas L. Kimball

LETTERS

Don't Pick in a Park

HAVING read with interest and pleasure Dr. Baldwin's article in VIRGINIA WILDLIFE on the Pygmy Pipe, I feel obliged to add that collecting plants or animals in a National Park requires a collector's permit. These permits are limited to specific purposes for scientific and educational activity, and can be obtained for such purposes through the Park Headquarters at Yorktown.

Our relationships through the years with our educational neighbors have always been cordial and cooperative but 1968 counted over 8,000,000 visits to Colonial National Historical Park and thus it is easy to see that restrictions on removing anything are not only reasonable, they are an absolute necessity.

It would be helpful to both the National Park Service and the general public if this information were presented in a future issue.

James W. Corson
Superintendent
Colonial National Historical Park
Yorktown

Doctor Baldwin's article should not have had the effect of encouraging collecting in the Colonial National Historical Park. He did suggest that single specimens of pygmy pipe be sent to him from areas that constitute gaps in the presently known distribution of the plant, but his article made it clear that the plant's presence in the Lower Peninsula area is well documented. We are happy to print Superintendent Corson's note as a reminder that collecting anything in any Park is prohibited (and we would add that it is no more than basic good outdoors manners to obtain permission before collecting elsewhere).—Ed.

Coast Guard Guards Nests

I am enclosing a letter (*printed below—Ed.*) of May 12, 1969, from the U. S. Coast Guard in case you find it of sufficient interest to print.

I regret that the Coast Guard was not given the full credit it deserves in the matter of standing instructions regarding preservation of osprey nests. The information regarding approvals necessary before pilings can be driven is important to know, and is appreciated. Additional comment or, better yet, more support for the idea would be welcomed.

Frank E. Cook
Montross

YOUR article concerning wildlife in the Northern Neck of Virginia which appeared in the May 1969 issue of *Virginia Wildlife* was read with great interest in this office. Please be advised that this district has long standing instructions to the personnel in the field not to disturb osprey nests unless they are obscuring aids to navigation, and, in that case, to remove the nest to another part of the aid where it will not interfere.

If an attempt is to be made to drive pilings to provide nesting areas for osprey, a permit must be obtained from the U. S. Army Corps of Engineers prior to accomplishment and referral must be made to this office for any determination as to whether lighting of the piling will be necessary.

John A. Dearden
Commander, USCG, Portsmouth
Chief, Aids to Navigation Branch

GROUSE TO THE EASTWARD

By C. H. SHAFFER
Game Management Field Coordinator

A decade ago in Virginia if anyone even suggested going grouse hunting anywhere except in the higher mountains of the Appalachian or the Blue Ridge ranges, he was either a Yankee or a raw novice sportsman. Would you believe that during the past hunting season (1968-69) a total of 151 grouse were harvested on Quantico Marine Corps Base? Were you aware of the fact that for a number of years some hunters have consistently collected their fifteen bird season limit on grouse in piedmont Virginia?

"Mountain pheasants," as they have often been called, have been observed as far east as the Amelia and Powhatan Wildlife Management Areas. Grouse populations have likewise been reported in the counties of Goochland, Louisa, Orange and Spotsylvania. It is obvious that something very significant has occurred with this important game bird; there has been a gradual extension of the grouse range through the piedmont toward eastern Virginia.

In this article we shall attempt to theorize on the possible causes of this interesting phenomenon. Let us begin by briefly reviewing what we know about the grouse itself and its habitat requirements.

As most mountain hunters will agree, the ruffed grouse is one of the most exciting and most desired of all game birds. However, less is generally known about this particular species than most any other game bird. In the traditional mountain and ridge ranges, grouse can usually be found along streams where there is an abundance and variety of food and cover plants. They can often be flushed in or near thick stands of laurel, rhododendron or conifers. Old abandoned homesites have always been favorite grouse territory, and they are often found near roads, trails or small clearings.

Most biologists who have studied the ruffed grouse stress the fact that this species requires a variety of interspersed cover types. Food habit studies indicate that the grouse eats a great variety of plant and animal material. Favorite food menus of Old Dominion grouse would include such items as berries, buds, leaves, fruits, seeds and fronds.

High and low grouse populations are always a source of speculation among both hunters and biologists. There are numerous theories advanced explaining fluctuating grouse numbers; some sportsmen adhere to the theory of a grouse cycle while others disclaim any such phenomenon in Virginia. Predators, poachers, disease, road hunters and weather are likewise blamed for shortages of grouse. During the 1967-68 grouse season these birds were extremely difficult to locate in most sections of their mountain range. Most grouse hunters experienced great difficulty in flushing even a few birds. Naturally, dire predictions were forecast for the 1968-69 season. But what happened? Old Dominion sportsmen realized one of the best statewide grouse populations and resulting harvests in many years. "Where did the breeding birds come from?" some asked. "They weren't in the mountains last hunting season." Obviously, the birds *were* there, but couldn't be located.

Grouse management has likewise offered perplexities. These birds have proved very difficult to raise in captivity and few game breeders attempt their propagation. Unlike the wild turkey, they are difficult to live-trap and transport. Most attempts at providing better habitat for grouse have been of questionable value.

About twenty years ago a wildlife management graduate student from V.P.I. tried to evaluate certain grouse management techniques being tested on the Jefferson Forests. He

Ruffed grouse and chick.

L. L. Rue III photo

Leonard Lee Rue photo

Interspersion of evergreens and hardwoods favors grouse populations.

had grouse census lines in three, different areas. Varying amounts of cutting and vegetative manipulation had been performed on two of the areas, while the third was the control area where no grouse management had been attempted. You might guess where the most birds were found—in the control area! This perplexing bird had fooled us again! It was concluded that the existing greater interspersion of hardwood and conifer types in the control area meant more to the grouse population than the purposeful habitat manipulations which were being tried elsewhere.

The emergence of grouse in significant numbers to the eastward is another puzzle for biologists to solve, but at least this is an exciting and surprising development. The addition of grouse to a region already blessed with a large variety of wildlife (quail, turkey, dove, woodcock, waterfowl, deer, rabbits, squirrel, raccoon) is another bonus for sportsmen in the area.

In an attempt to discover the possible reasons for the increase or spread of grouse into the piedmont and eastern sections of the state, management areas were visited, habitat was evaluated, grouse hunters were interviewed, and wildlife managers were questioned. Efforts were concentrated on the Quantico Marine Corps Base, the State Forests, and in the Buckingham-Appomattox-Nelson County region near the James River. On these areas there appeared to be the highest grouse population build-ups during recent years.

The Quantico story is most enlightening and significant since the wildlife personnel here maintain accurate records on game collected daily by hunters. The following kill on grouse has been recorded over the past seven hunting seasons:

Quantico Grouse Harvest

Year	*Birds Collected*
1962-63	5
1963-64	8
1964-65	81
1965-66	53
1966-67	97
1967-68	110
1968-69	154

These kill figures show the gradual emergence of an excellent grouse population over the past seven years. As the number of birds increased, the hunters also grew in numbers. However, populations continued their upward trend. Marine personnel reported a large carry-over of birds following the very successful 1968-69 hunting season.

The wildlife on Quantico is managed cooperatively with the Marine Corps and the Game Commission carrying on a joint intensive program. Management techniques, which are designed for all game species, include food and cover planting, mowing, prescribed burning, disking, pruning fruit trees, and clearing around old homesites. Grouse are found most frequently around these latter areas where usually Japanese honeysuckle, fruit trees, greenbrier and dogwoods abound.

On the James River areas, sportsmen report a similar trend in grouse population increases over the past seven years. They have observed grouse around old homesites, in laurel thickets, along small streams, in thick cover or in combinations of these habitat types. The reader or grouse hunter can readily note the similarity of this habitat to that found in the higher mountain ranges.

Some observers have theorized that the large amount of piedmont land that has been converted to pine plantations has inadvertently encouraged grouse populations by contributing thick cover, honeysuckle and other preferred habitat ingredients for this game bird.

There has been no evidence, nor are we suggesting the possibility, of a rapid mass migration of grouse from the mountains eastward. In all study areas, local residents reported the presence of a remnant or straggling population of grouse over a period of many years (at least twenty). Food and cover conditions appear to be excellent now for grouse in the piedmont. The only obvious difference from habitat in the mountains is the elevation factor which apparently is not too important.

Biologists now have plans to live-trap and transplant some of the eastern grouse into areas where no brood stock is present. This technique has proved successful in establishing wild turkey flocks in many sections of Virginia. Perhaps we can be just as fortunate with "mountain pheasants"!

Whatever the reasons, it is now obvious that grouse have adapted to habitat conditions in the piedmont region of Virginia and are flourishing. There appears to be a greater abundance of natural grouse food and cover than exists at higher elevations in the traditional grouse range. Whether the ruffed grouse will gradually spread further eastward is a matter of conjecture. Only time will tell. In the meanwhile, sportsmen can keep abreast of the situation and perhaps discover a very thrilling sport in their own backyard without the necessity of traveling westward to the hills.

Evaluating Page County Pheasant Releases

By ERNEST J. FOLDI
Harrisonburg

WITHIN the past year the Virginia Game Commission has been taking a close look at its exotic game bird introduction program. This program was started in 1958 and since then over 25,000 pheasants of several species have been introduced throughout the state.

Census efforts have been made on the most promising release areas to determine the status of the bird population from year to year. One of the more successful release areas has been Page County. This release consisted of eastern Iranian black-necked crossed with the Chinese ring-necked pheasant. In April of 1963 a total of 463 of these hybrid birds were turned out on the H. T. N. Graves farm north of Luray. In August of the same year 352 eight-week-old birds were turned out on the same farm. The next release in Page County was made in April 1967, when 110 birds were released on Bertram Kite's farm near Grove Hill. This makes a total of 925 pheasants introduced into the county.

These hybrid pheasants seem to be doing very well in Page County, and it is hoped that they will fill a void left by native birds. Its habits resemble those of the Chinese ringnecks. It feeds on seeds, fruits, acorns, grain, green food and insects. It is climatically suited to our southern states.

Game manager releases a hybrid pheasant similar to those stocked experimentally in Page County.

Foldi photos

Strong flying hybrid pheasant leaps from coop into air.

Weighing 1½ to 2½ pounds, the male is similar in coloration to the Chinese ringneck, having a white ring around its neck. A magnificent tail, up to two feet long, adds to its interesting appearance. The soft-toned females have a shorter tail and subdued brown and black markings. They are a fast flying bird that promise to make good hunting if and when their numbers increase.

Some of these birds are now going into their seventh nesting season this summer and some decision should be forthcoming on whether or not these birds are establishing themselves.

To determine the population of birds in a release area, several methods are used during the year. In the spring a crow count is taken. This consists of driving through the release area covering an established route 20 miles long and listening for the cock birds crowing. It is done early in the morning, beginning 30 minutes before sunrise, and on three morning runs between the middle of April and the middle of May. This is the period when mating is most active. To count the pheasant calls, a stop of two-minutes duration is made every mile.

Following the crow-count period, sight observations are made by the game managers. This is done once a month to

record all birds seen singly or in broods, and to check with landowners, hunters and other individuals as to the number of birds they have seen.

In late October or early November and again in late January or early February a field census is made using dogs. In this count two men with two dogs cover as much of the released area as possible for two days and count the number of birds that are flushed. The largest number of birds flushed when censusing with dogs in Page County has been 23 in several hours of field work on two different days.

With modernized agricultural practices and urbanization curtailing the productive habitat of some of our native species of small game it has been necessary to try to find a suitable substitute. The picture of this shifting land use means that Virginia game managers are faced with the problem of producing game bird surpluses on land presently game deficient. To meet this challenge, game managers are searching for a bird that will fit into these certain agricultural regions.

All of these exotic birds are released in preselected areas that are suited for successful results. Several things are considered in picking a release site. Good pheasant country consists of a mixture of cultivated land with corn and small grain and hay, along with brushy areas that provide cover during the winter months. A thorough evaluation of the release site is made by the game biologists, and if found suitable, birds are stocked. However, even with good food and habitat the success or failure of a stocking program depends a great deal on the cooperation and protection given the birds by the people in the release areas.

In transplanting these birds there is a need for some measure of evolutionary adjustment to the new range. Feeds are different from what they are accustomed to and cover is different also. The birds will have to adjust themselves and learn to live with the predators of the area—cats, dogs, raccoons, etc.

The question has been raised on occasions, whether or not pheasants will compete with and drive out quail. This accusation has been found groundless, as evidenced by the compatibility of quail and pheasants in many sections of the country. Ohio reports that quail and pheasants get along together on the same range.

Occasionally pheasants will eat young mice when they run across them, and it has been reported that occasionally they will eat very young cottontails. This is an unusual occurrence, however, and pheasants can certainly have no great influence on either mice or rabbits. That pheasants cannot be appreciably affecting cottontail populations is well shown by the trend of cottontail and pheasant kill in Michigan in the last ten years. Both reached a peak and sank to a low together. Thus, they had the most rabbits when they had the most pheasants, and the fewest rabbits when they had the fewest pheasants. The reverse could have been expected if pheasants were holding down rabbits by eating their young.

There is no hunting season of these pheasants contemplated in the immediate future, and the shooting of them or molesting them is strictly prohibited.

The Game Commission is anxious to learn if the combination of good farm land, predator control and public cooperation will enable these birds to become established in Page County. If anyone observing these birds would drop a line to Max Carpenter, Virginia Game Biologist, Route 1, Dayton, Virginia, the information thus gathered could be very helpful to the Game Commission and the day may not be too far away when the Valley of Virginia may be producing game birds in sufficient numbers to allow its sportsmen to enjoy a day in the field hunting them and having them on the hunter's "most wanted list."

Reprinted courtesy *Luray Page News and Courier.*

Typical hybrids of Iranian blacknecked and Chinese ringneck pheasant strains. The male is similar in coloration to the Chinese ringneck, and has a magnificent tail up to two feet in length.

Commission photo by Harrison

A VISIT TO THE DISMAL SWAMP

By THOMAS D. JONES
Warrenton

IN the March 1968 *Virginia Wildlife*, an article entitled "Seasons in Dismal Swamp" by Ulrich Troubetzkoy, interested me very much. It rekindled a desire I had had since my sophomore year at V.P.I. in 1930-31 to visit this mysterious and legendary place. At that time my roommate, the late A. S. Hargroves, Jr., of Driver, told me about hunting hog, bear and deer in the swamp. This seemed particularly exciting to me because none of these animals were then to be found in my section of Northern Piedmont Virginia.

Then in 1967, on a return trip from a vacation at Kitty Hawk, North Carolina, my wife and I stopped at Deep Creek and inquired about going through the swamp to Lake Drummond. We were told we might find someone in Suffolk with a key who would let us in, but the dust would fill the car if the windows were down while if they were up we wouldn't be able to see because of the dust and would,

House on pilings at the edge of Lake Drummond in the Dismal Swamp.

of course, suffocate from the heat. If we got out of the car, the ticks, mosquitoes, snakes and assorted insects and reptiles would eat us up. When I asked what there was to see, he said "swamp." We decided to come on home.

After reading Mrs. Troubetzkoy's article, I became determined to visit Lake Drummond the next winter, which I did with my son, Dick, on March 15, 1969. My game warden, Gordon Wilkes, had helped me get in touch with Mr. Dewey Howell of Suffolk, owner of Lady of the Lake Hunt Club on Lake Drummond. A cordial gentleman who also runs an auction barn, Mr. Howell invited us to come on down when I told him our plan. The trip was all we had expected it to be. This fabled and fabulous, dismal swamp is truly an eerie place, forbidding and fascinating at the same time. We were amazed that a three-hour trip covering some 175 miles could transport us into a region so utterly foreign to our Northern Piedmont, all within the confines of the State we have all our lives called home. The Spanish moss, juniper, cypress, bay bush and jungle with roots reaching into dark brown swamp water combined to suddenly put us in another world.

We entered along the Washington Ditch, a few miles south of Suffolk, with Mr. Howell's son, Corky, leading the way. Unlocking the gate to the Washington Ditch Road, he took us to the clubhouse, built on pilings over Lake Drummond. There he left us with the keys to the club and words cannot describe the solitude and stark beauty of this jungle swamp with the lake at its center. Never have I seen a sun-

Leonard Rue photo

Curious raccoons are abundant in the swamp.

set like that one beyond the dark fringe of trees circling the lake, nor a sky with every star so perfectly reflected in the still, silent lake, dark brown by day and black by night. Two and a half miles long, two miles wide, up to six or seven feet deep, the lake still keeps to itself the secret of its origin.

The Union-Camp Manufacturing Company which owns the western section of the swamp, seems to be doing a good job of conservation on its property. The ditches or canals serve two purposes: one, to drain the swamp sufficiently to permit reforestation of trees that cannot live in the water, such as original juniper and cypress; the other to provide fire protection.

A portion of Lake Drummond and the swamp.

Causeways are maintained along each ditch, and there is a constant struggle between man and the swamp. When we entered at 2:00 p.m. the road was dusty. The next morning water was standing in the ruts and the swamp water was noticeably higher. This apparently was due to the lack of evaporation during the night, since the lake is twenty feet above sea level and water flows out of it into the inter-coastal waterway canal.

The Union-Camp Company leases parts of the land and lake front at nominal fees to clubs for hunting, fishing and boating. Each person who enters must have a key to a swamp road which parallels a ditch.

Coons watched us curiously from small trees along Washington Ditch as we entered. We saw a solitary stealthy blue heron fishing for his supper in the ditch, then wheel away drawing up his long legs as a plane draws up its landing gear. Wild ducks took off from the water like propeller-driven planes and disappeared over the trees. Although deer tracks were visible all along Jericho Ditch, we saw no deer. Nor did we see bear or any of the more secretive animals such as otter, mink and bobcat which we knew were lurking in the jungle.

On October 1, 1965, M. M. Sutherland, Director, Department of Conservation and Economic Development, made a report to Governor Albertis S. Harrison on a study of the advisability of establishing a State Park in the Dismal Swamp area of Virginia. The report was issued in the form of an illustrated booklet, the first sentence of which reads: "To all lovers of the out of doors the word 'swamp' implies mystery." The report states that the Dismal Swamp has always been a mysterious place and from Virginia's earliest history has attracted many great Virginians. In 1728 William Byrd led a survey party through the swamp in order to establish the Virginia-North Carolina line. Thirty-seven years later George Washington initiated the canal system. The Washington Ditch by which we entered still bears his name. In 1794 Governor Patrick Henry promoted a waterway suggested by William Byrd and a 22 mile canal was opened to traffic. The appeal of the swamp is not merely local, however. According to the report, "Harriet Beecher Stowe, Henry Wadsworth Longfellow and Sir Thomas Moore were moved in their time to write of this unusual area."

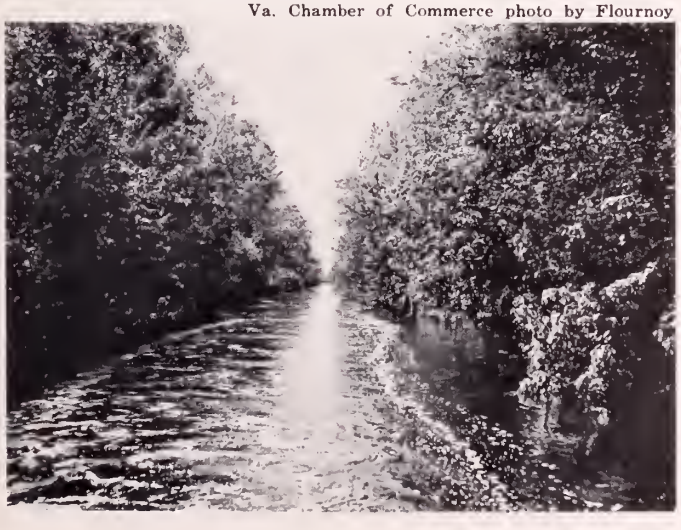
This study has produced tentative results. With the publication of the findings of the study, the Division of Parks recommended that the State acquire at least 50,000 acres, including Lake Drummond, and this area be administered as a wildlife management area under the Commission of Game and Inland Fisheries. It was also suggested that a portion of this area be designated as a part of the Natural Areas System, and that a tract of typical swampland east of Route 17 be set aside for the establishment of an Interpretive Center.

Leonard Rue photo

We saw no bears, but they are there.

Ditches provide the most convenient access into the swamp, most of which is impenetrable to the visitor on foot.

Va. Chamber of Commerce photo by Flournoy



Apparently no progress has been made toward bringing any of these recommendations to a successful conclusion, but it is still to be hoped that this whole Great Dismal Swamp can be saved from further exploitation in the name of progress. Especially now that our State is going through a rapid transition from a rural to an urban society, the need to preserve this truly unique, wild and beautiful area becomes increasingly more important. Sunday morning as we drove out of this beautiful and solitary place only a scant six miles from the outside world—yet a retreat and sanctuary for nature lovers that is twelve miles wide and thirty miles long (including the North Carolina part)—we could only hope it will not go the way of the Everglades.

Atomic Energy and the American Chestnut

By E. E. RODGER
Chief, Forestry Relations
Virginia Division of Forestry

THE LESESNE STATE FOREST, a gift to the Commwealth of Virginia from Dr. and Mrs. Arthur De T. Valk, Jr., of Wilmington, Delaware, which was dedicated May 16, 1969, will be devoted to the development of blight-resistant strains of chestnut that have the many desirable qualities of the native American chestnut destroyed by the fungus *Endothia parisitica*. Chestnut trees resulting from pioneer research efforts in the field of chestnut irradiation and hybridization already are growing on the newly acquired State Forest.

A 1955 newspaper report covering a speeeh in Atlanta, Georgia, by Dr. W. Ralph Singleton triggered a chain of events that may have a profound effect on the future of the blight-troubled American chestnut. Dr. Singleton, University of Virginia, and genetieist for the National Colonial Farm of the Accokeek Foundation, is a pioneer in the field of seed irradiation, espeeially that of eereal grains. His speech to the scientists meeting in Atlanta in 1955, ealled attention to the possibility of developing a blight-resistant American chestnut. It was this part of Dr. Singleton's report that launched a research projeet that brought together a group of people with one common interest—bring back the American ehestnut.

The American chestnut was once a major component of the mountain forests from New York to Georgia. The nut was sought after by rural and urban folks and was often the source of cash for many mountain dwellers. The trees grew fast and tall providing rot resistant poles and fence rails. The lumber was light and easily worked and the wood was used as a source of tannin extraet for the leather industry. The ehestnut was a main diet ingredient of the wild turkey, deer, black bear, and the hogs that the mountian dwellers permitted to roam.

The introduction of the chestnut blight brought tragedy to the shores of America. The discovery of the blight was made at the New York Zoologieal Park in 1904. The disease spread like "wildfire" to destroy, in two decades, all of the eommereial stands of one of the East's most valuable hardwood trees.

Millions were spent to control the blight. It was the most serious plant disease epidemic ever known in this eountry. Foresters, scientists, governments, and industry pooled their resources to combat the fungus. Sanitation strips were cut through the forested areas of Pennsylvania. World War I interrupted much of the work and by the time the forces could be regrouped the blight was completely out of control.

One of the largest lumbering projects of the 1920's and 1930's was the salvaging of the estimated 15 billion board feet of chestnut lumber that had been blight killed. As near as 15 years ago a few timber operators were still salvaging trees and logs from Virginia's mountainsides.

The study of the blight and an attempt to develop a blight-resistant strain of chestnut with desirable qualities has been a continuing effort since the fungus first hit America.

The most recent large scale study is centered in Virginia. More specifically, the study is the reason for the newly aequired State Forest nestled in the foothills of the Blue Ridge Mountains of Nelson County. Dr. and Mrs. Arthur De T. Valk, Jr., are outdoor enthusiasts and are eager to share their love of nature with others. What better way to express this love than to give to the eitizens of the Commonwealth clear title to 230 aeres of typical mountain hardwood forest land. Furthermore, Dr. Arthur Valk and his wife, Ann Dupont Valk, provided a financial grant to be used by

Typical chestnut foliage, burr and nuts. The chestnut was one of the most important timber and mast producing trees of the region.

the Virginia Division of Forestry, the eustodian of the new state forest, for road eonstruction and other necessary work to develop and maintain special researeh projects.

The linking of people from various professions and vocations with a eommon interest is, indeed, typieally American. For instanee, the "team" working with the American chestnut on the Lesesne State Forest is eomposed of a research ehemist, a professor, a state forester, a physician, and a genetieist. Team member Dr. Albert Dietz, a research chemist, has had a long-time interest in the chestnut problem. It was Dr. Dietz who read of the irradiation possibility and immediately contaeted Dr. Singleton. The two men combed the Blue Ridge Mountains in search of chestnuts for testing. Chestnut is a prolifie sprouter and sometimes the sprouts produce nuts before they are killed by the blight. The ehestnuts found by the men were sent to Brookhaven National Laboratory in New York in 1956 for the initial irradiation treatment. An annual seed collection and irradiation program has eontinued since that time.

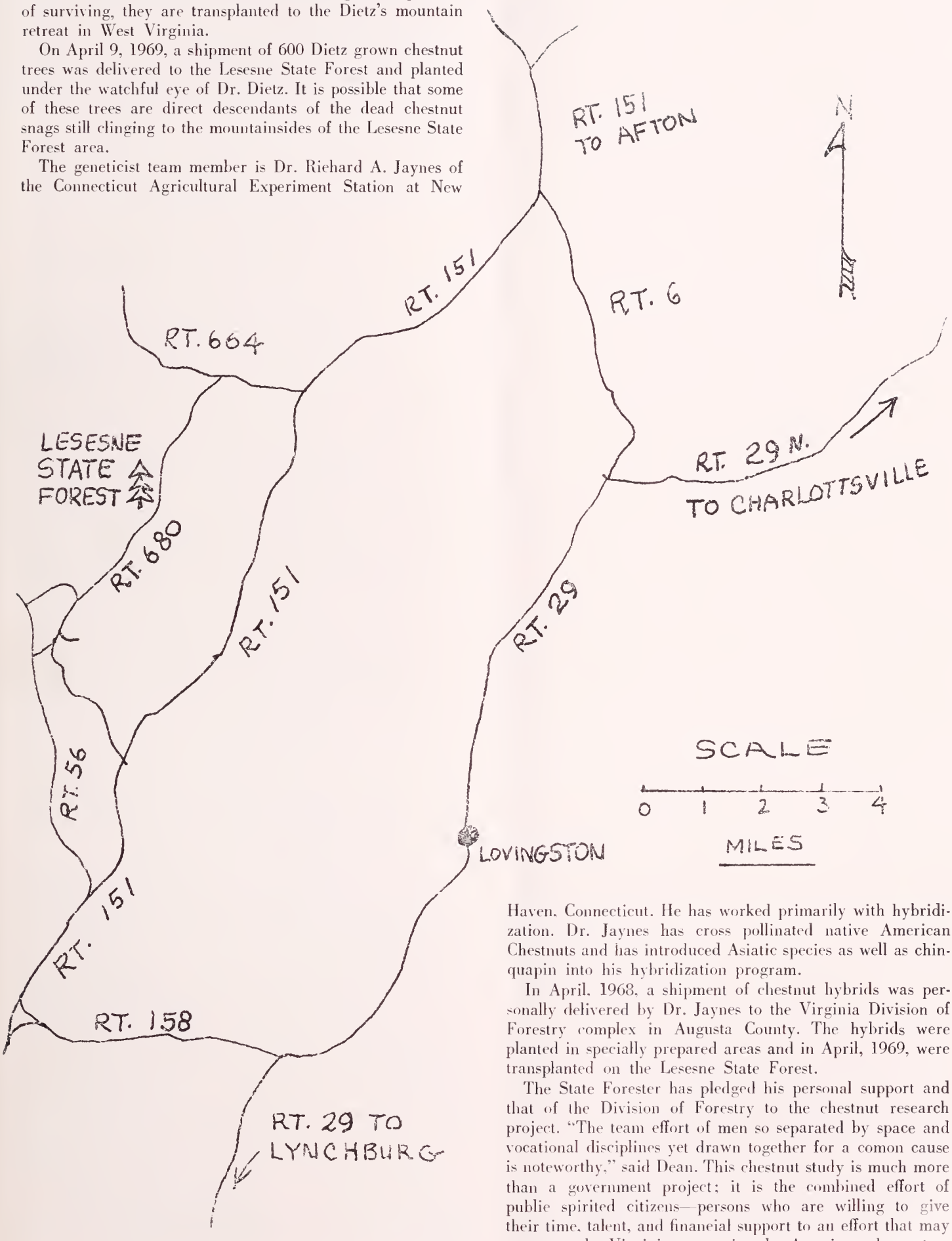
In 1959 Dr. Dietz learned of several American chestnut trees growing in Wiseonsin. These trees were grown from seed colleeted from the Blue Ridge Mountains during the Civil War period. Because of their location, far from the natural range of the Amerieaan chestnut and the accompanying blight-infeetion area, the Wiseonsin trees have escaped the deadly fungus. The present owner of the Wisconsin trees has given Dr. Dietz an adequate supply of nuts each year for researeh purposes.

Working with the American Chestnut is more than a "hobby" for Dr. Dietz; it one of his "first loves." He and his

son grow the chestnut seedlings in their backyard at their home in Wadsworth, Ohio. After the seedlings show promise of surviving, they are transplanted to the Dietz's mountain retreat in West Virginia.

On April 9, 1969, a shipment of 600 Dietz grown chestnut trees was delivered to the Lesesne State Forest and planted under the watchful eye of Dr. Dietz. It is possible that some of these trees are direct descendants of the dead chestnut snags still clinging to the mountainsides of the Lesesne State Forest area.

The geneticist team member is Dr. Richard A. Jaynes of the Connecticut Agricultural Experiment Station at New Haven, Connecticut. He has worked primarily with hybridization. Dr. Jaynes has cross pollinated native American Chestnuts and has introduced Asiatic species as well as chinquapin into his hybridization program.



In April, 1968, a shipment of chestnut hybrids was personally delivered by Dr. Jaynes to the Virginia Division of Forestry complex in Augusta County. The hybrids were planted in specially prepared areas and in April, 1969, were transplanted on the Lesesne State Forest.

The State Forester has pledged his personal support and that of the Division of Forestry to the chestnut research project. "The team effort of men so separated by space and vocational disciplines yet drawn together for a comon cause is noteworthy," said Dean. This chestnut study is much more than a government project; it is the combined effort of public spirited citizens—persons who are willing to give their time, talent, and financial support to an effort that may return to the Virginia mountains the American chestnut.

Let's Cook Catfish

By MARJORIE LATHAM MASSELIN
Richmond

I ANSWERED the telephone the other day, and an anguished voice in the receiver said, "Mrs. Masselin, I *caught* him!"

"You didn't!"

"Ye-ah . . . I did." Sadly.

"You sound disappointed."

"Well, I'll tell you . . . ." There was a pause, "I've got him in the bathtub, and he's in pretty good shape. I think I can put him back."

The anguished voice belonged to "Chip" Rice, one of our son's fishing buddies, and the subject of our conversation was an old grandfather "Cat," wise in the ways of fishermen, that the boys have been after ever since they learned how to fish. Often, in my secret thoughts, I had pondered what would happen if one of them ever actually caught the old fellow. Now I knew. Horse racing may be the sport of kings, but fishing is the sport of boys, and it *is* the sport of it that counts . . . always . . . when the gauntlet is really down. No matter how much they might long for a good catch or savor the prospect of dining on it, there are some things that just are not . . . well, not sporting . . . not fair. I have never known a boy who was a fisherman who was not also fair-minded and a gentleman. When God created fish and boys He was having a good day . . . a real good day.

There is no denying that a catfish will give the fisherman sport a-plenty, but at the same time there is no overriding need for an abundance of sophisticated equipment to try your hand at catching one. Given the inclination, you need little more than a bamboo pole, a hook and a worm to catch a catfish. Admittedly, these boys, like most other people, have gone into it with a somewhat deeper investment, but the point I want to make is that fishing for catfish is *one* sport that is still very much open, even to a city boy on the fringe of financial insolvency. The River, the Fish and the Day are all there for the taking, and you have only to cross a bridge over the James on a summer day to notice how many "boys" are aware of it.

They are there, spread out along the banks and standing on the rocks in midstream. They are old, and young and middle-aged; they are black and white and as the summer wears on and the sun does its inevitable duty they turn to varying shades of bronze. They are an incredible assortment from all walks of life and all parts of the city . . . an incredible brotherhood. You wonder, looking at them, if those people who gasp about the Generation Gap have ever heard of fishing.

The first time I ever met a catfish—officially, that is—so that I knew with whom I was shaking hands, was during a tour at Fort Benning, Georgia. Some casual friends of ours in Columbus, dutifully hospitable in the best Southern tradition, rang up at the end of the first week to ask if we would like to "eat some fish." Conjuring up a well-boiled lobster in my New England-trained mind's eye, I said, "Marvelous! What time?" and the die was cast. When my husband came home that night, the vision of the lobster was quickly dispelled. He had been to Georgia before, and when I explained happily that we were invited to dine at a fish camp on the Chattahoochee with Polly and Virginia and "some other people," he assured me with the masculine self-confidence that always stuns me that I could expect to eat catfish and nothing but.

"Catfish?" I asked tentatively.

"Catfish," he replied firmly and stepped into the shower, leaving me to mull it over in solitude.

"Exactly what," I wanted to know when he stepped out again, "is a catfish?"

"A catfish is a very interesting character that your grandfather would have called a horned pout . . . ."

"*Those things?*"

". . . and which, undoubtedly, he considered so far beneath contempt that he threw 'em back as fast as he hooked 'em."

"Undoubtedly. And so have I. Who ever heard of *eating* one?"

"You just have."

"I think I'm going to have a headache."

"Take an aspirin." He handed me the bottle and I put it right back on the shelf. If a woman wants to develop a headache in an emergency, she ought to be allowed the privilege.

"A catfish is a river fish, then?"

"Right."

I considered that for a minute. Well, obviously, there was only one.

"Not the Chattahoochee?"

"Sure."

"But it is absolutely *thick* with mud."

"They rinse 'em off a little before they cook 'em. Come on, get dressed."

"Oh, dear . . . ." I was trapped.

How tenderly was I trapped! The fish camp itself did not at once still my lingering doubts. It was like a hundred other fish camps that I have been to since. The tables were long and of rough wood worn smooth through constant use and scrubbing, the walls were whitewashed and the lighting arrangement was a series of bare blubs suspended from open beams. They sort of waved in the breeze created by one or two antiquated ceiling fans and cast strange patterns on everything. Yet the simplicity seemed not to faze our companions. They settled themselves as though expecting to dine well and at length, I among them. Of course my accent left nothing to the imagination, and the pleasant Georgian on my right turned to me and drawled, "Ever eaten cat before?"

"N-no. I'm afraid not," I answered without enthusiasm and wished that he had not put it quite that way. But he seemed pleased with my answer. He rubbed his palms together gleefully and announced to the entire world, or so it seemed, "Look here, we got a Yankee to educate!"

Well, I was educated. As soon as the first platter, heaped high with crisp-fried catfish appeared, I was educated. There were more platters heaped with mountains of French-fried potatoes and onion rings. They appeared and disappeared and reappeared in an unending supply. For about two hours we abandoned ourselves to their consumption. I have no idea where we put it all, but we certainly put it away . . . somewhere. You just cannot imagine how elegant that bewhiskered little gargoyle of a fish can be when he has been coated with cornmeal and immersed in hot fat until brown . . . not unless you have eaten one, too, you can't! Imagination on *that* scale is beyond the finite mind of Man.

Well, it is just one more proof that literacy does not necessarily overcome ignorance. I could cry every time I

(Continued on page 14)

VIRGINIA WILDLIFE

☆ ☆ ☆ ☆

CONSERVATIONGRAM

Commission Activities and Late Wildlife News . . . At A Glance

2000 PHEASANTS STOCKED IN VIRGINIA. Approximately 2000 pheasants were stocked in Virginia by the Commission of Game and Inland Fisheries this spring in a continuing effort to establish some form of this game bird in the state. The heaviest stocking was in Rockingham and Augusta Counties where good habitat and an intensive predator control program have combined to create a good opportunity for establishing a new species. Other releases were made in southwest Virginia, piedmont and tidewater sections to bolster previous stocking efforts. The hybrid Iranian blackneck-Chinese ringneck is still the mainstay of the Game Commission's foreign game bird introduction program.

Although usually stocked in the fall, a number of kalij pheasants were released in Henry County this spring to encourage nesting before the groups become widely dispersed. Followups on previous releases in Giles County showed that the birds survived Virginia's rugged mountain winters and successfully reared broods.

To help Virginia game breeders and shooting preserves obtain improved stock, the Game Commission is again making a limited number of hatching eggs of hybrid and blackneck pheasants available to licensed breeders at prevailing prices. Excess male birds will be made available to preserves next fall. Those who have used the blacknecks and blackneck-ringneck hybrids find them more sporty although smaller than the standard ringneck.

NEW WILDLIFE AREA FOR SOUTHWEST VIRGINIA. The Virginia Commission of Game and Inland Fisheries along with the Virginia Division of Mine Land Reclamation and the Tennessee Valley Authority has signed a cooperative agreement with the Penn Virginia Corporation making 9,760 acres of company land in Wise and Lee Counties available for public hunting. The project will be known as the Hagy Wildlife Area in honor of the late Clifford H. Hagy, Senior Vice-President of the Penn Virginia Corporation.

The prime objective of the cooperative venture will be to demonstrate the best conservation practices on strip mined land which will include soil stabilization, erosion control plantings, wildlife food and cover plantings, and the creation and preservation of water holes. The area will be open for hunting and fishing to all properly licensed sportsmen. The tract is located near Keokee and Exeter.

The company will continue its mining and timber management activities on the area. The Commission of Game and Inland Fisheries plans to begin wildlife rehabilitation efforts by stocking white-tailed deer this winter. Other hunting should include squirrels, rabbits, grouse, turkeys plus a few quail and doves.

WESTON ADDITION TO PROVIDE DOVE HUNTING. A 278 acre addition to the Game Commission's Weston Wildlife Management Area in Fauquier County is expected to provide some top-notch dove shooting for northern Virginia hunters this fall. The new section is nearly all open fields, which will be planted to food and cover for doves and other upland game species. The 271 acre tract already owned by the Commission is managed as a refuge and field trial area.

The new tract borders Route 616 just east of Casanova and extends to Turkey Run. The original Weston tract also borders this stream but the two properties fail to join by some 80 feet. The recently acquired portion has a large parking lot and a ½ acre pond.

Most wildlife food planting will be developed by means of share-crop farming. Plantings will include corn, millet, soybean millet hay, and patches of the Commission's special game bird food mix. All crops are planned for early harvest to provide optimum dove hunting.

The original Weston tract, a gift of the late Miss Charlotte St. George Nourse, will continue to be used for field trials and other non-hunting forms of outdoor recreation. The Fauquier Beagle Club maintains an 80 acre rabbit enclosure on the property for training beagles under a cooperative agreement with the Commission.

How to Clean a "Cat"

Commission photos by Kesteloo

A pair of pliers or "nippers" is helpful in holding the catfish and avoiding the sharp fin spines during preliminary washing.

Use a sharp knife to cut through the skin completely around the fish jus

Cut through the skin along the dorsal side of the fish from the fi

Let's Cook Catfish (Continued from page 12)

think of all those pleasant little pout that in disgust I tossed back into New England streams. It was a badly misspent youth. The worst pity of all was the horrifying discovery that my infallible grandfather was after all as fallible as any man, but at least I had not made the discovery until I was a woman grown and could forgive it.

Recently, I read that there has been experimenting with "Catfish Farms" and that ultimately it is hoped the catfish farmer will replace the chicken farmer. Apparently, catfish are easier and cheaper to raise than chickens are.

It is a jarring thought and, I must say, I hope these people know what they are doing. The chicken, I have always believed, is a relatively pallid little creature, not totally devoid of personality to be sure, but certainly not in the same league with the sterling character of the catfish. You surely cannot think of keeping a chicken in the limbo of a bathtub prison while deciding whether it is worth putting a permanent end to the pursuit for the transient pleasure of enjoying the flesh. Can you? Could you devote years of languid summer holidays to outsmarting a chicken? Somehow it seems an absurdity of civilization to relegate the catfish to the frozen food counter.

The way I see it, we are already in danger of producing a generation—in the foreseeable future—who will be convinced that milk and potatoes come out of four-, six-, and eight-serving size boxes instead of from cows and the good, rich earth. Are these same poor children also to think that catfish are headless, spineless filets that grow in one pound freezer packs?

When the world has been too much with him, and your young son plows into the kitchen of a morning, fishing gear in tow, while you are still trying to coax the cooking of toast, eggs, bacon and coffee to a more or less simultaneous conclusion and says, "Hey Mom . . . how about if I catch some catfish for supper?" what are *you* going to say?

(Continued on page 16)

head and gill openings.

Using the "nippers," pull the skin first off one side and then off the other.

ll the way to the tail.

Finally, use the sharp knife to split or filet the fish, cutting from head to tail along the backbone.

Let's Cook Catfish (Continued from page 14)

Well, bolstered by the knowledge that he will be out from under foot for the rest of the day, I should *hope* you would say, "Now there's a happy thought! Can I fix a sandwich for you to take along?"

Could you instead say, "Oh, don't bother, dear. They were on sale at the supermarket this week and I stocked up." Would you have the *gall?* Could any mother, no matter how harassed, have the colossal crust to make a statement like that? To deny her own flesh and blood the pleasure of meeting these bewhiskered old gentlemen face to face and matching wits with them from opposite ends of a fish pole? Catfish Farms! Dear Heaven! Better stick with the fish pole, I think.

Fried Catfish

No matter how you slice it, a catfish is a freshwater fish, and like all his freshwater kin whether they be kissin' cousins or more distant relatives, he has a tendency to be *slimy*. The first time you meet three or four of these monsters spread out on the kitchen counter, you may very well discover that your thoughts are straying—even rushing headlong—toward the inhabitants of Loch Ness.

There are two rational lines of approach. They can be scrubbed clean. Yes, really they can. And the skin can be eaten. If that idea lacks appeal, they can be skinned. Whichever path you decide to follow, I am bound to warn you it is equally full of rocks, ruts and potholes. The main pitfall, if you choose the latter method, is that you must have the right kind of knife, the right shape, with a blade that will take an edge and hold it. They are available in hardware stores and in restaurant supply houses. The blades rust, and you have to take care of them, but then knives are supposed to be given care as every good cook knows.

Once you have the fish skinned, gutted and beheaded in that order, you may then decide whether to filet it as well. Actually, this is not hard: it just takes practice. You can look at pictures, drawings and diagrams of the anatomy of a catfish for the rest of your life, but until you get a freshly caught specimen on the table and go to work on it, you will never master the art. Naturally, a knowledge of the bone structure gained from studying a diagram will help, but it is trial and error that does the teaching.

Whether you split or filet the fish, the first step in preparing for the fire is to coat the flesh with fine, white cornmeal. Usually, if the fish is fresh and moist, enough meal will adhere without further moistening, but to assure that the meal sticks and forms an unbroken, crisp coating in the hot fat, it is wise to dip the fish first into egg beaten with a little water—1 teaspoonful to an egg. If you are a salt-eater, salt should be added to the egg or the fish salted lightly before rolling in the meal.

The final step is to fry it. For this I prefer to use peanut oil because it seems to me that it spatters less than other types and also because it seems, to me at least, to absorb less "fishy" flavor. It should be in a deep kettle, preferably one that allows the cook to regulate the heat. When the fish first goes in, the fat must be smoking hot to immediately seal in the moisture and form a crust that will protect the flesh from soaking up the grease. Since heat of this fury will brown the fish almost at once, it is advisable to lower the heat for the remainder of the cooking time required. That, naturally, will vary with the size of the fish and whether the bone is left in or removed. Seven to ten minutes is about average.

If you plan a real fish fry such as I described earlier, you will need three kettles going at once because potatoes, onions and fish just do not cook at the same speed and they really must be ready to serve simultaneously. None of these foods keeps well.

Many people like to serve a slaw with so much fried food, but I have given such recipes in previous articles, and this is a relatively simple dish for which there are millions of recipes readily available. Frankly, I do not especially like it with catfish. I think cabbage salad is as badly overused as Freedom. What I do enjoy serving is a homemade Tartare Sauce.

Tartare Sauce

This can be made with a good commercial mayonnaise—*never* with salad dressing—but if you have the time and inclination a homemade mayonnaise is infinitely better. I like to make it with lemon juice rather than vinegar when it is to go with fish.

To a cupful of this, add about two-thirds of a cup of well-drained sweet pickle relish, a pimiento chopped and a bottle of capers, drained. This is enough to serve a regiment, so if you are not serving a regiment you probably should cut it down accordingly.

That is a classic southern fish fry. However, if the boys had a disappointing day and you relied on their having a good one, thus leaving yourself in the position of having to produce a family meal out of a single decent sized catfish, there is always that other southern classic, Catfish Stew, on which you can rely.

Catfish Stew

Scrub or skin one or two catfish and set to simmer in just enough water to cover. Add a sliced onion, a sprig of parsley and perhaps a rib of celery, salt and pepper. Cover and let simmer until the fish is done.

Remove the fish carefully to a platter to cool and strain the liquid. Wash the pan and melt about 3-4 tablespoons of butter. In this, gently fry a thinly sliced onion until it is golden and transparent. Add a large baking potato, peeled and sliced and the liquid from the fish plus a little more water if it seems necessary. Cover, and let the potatoes cook while you attend to the fish.

If it was not skinned before cooking, remove and discard the cooked skin and carefully remove and discard all the bones. Add the fish to the cooked potatoes and onions along with a pint of cream or half-and-half. When this is thoroughly heated and just short of the boiling point, pour it into a heated soup tureen, float a piece of butter on top and serve.

As far as I know, there is no legislation on the books *yet* that disallows the pan-frying, baking or barbecueing of a catfish. All of these methods are perfectly good ways to serve catfish. They just are not *the* way to serve it, from my point of view. If you want to cook your "cat" in any of these ways, please do so, but do me one favor, will you? If you barbecue it over charcoal, will you kindly expose it to the charcoal and not seal it up in foil? Truly, I have nothing against the makers of aluminum foil. I think it is great stuff and ranks right up there with the invention of the printing press as a step forward in civilized living, but I have never been able to come up with a reasonable explanation for why people go to all the trouble of making a charcoal fire for the purpose of cooking a meal and then deliberately exclude the flavor of the smoke from the item to be cooked by it. The whole point of cooking over charcoal is to make the food taste as though it had been cooked over charcoal. Right? Right!

Blacksnake in Slow Motion

By WALLACE OBAUGH
Hinton

I HAD been watching a family of young squirrels at a game of tag, or perhaps follow the leader. For awhile the merry chase was confined to one large oak; up and down and around its massive trunk, to the ends of the boughs and back, and in aerial leaps from limb to limb. Now and then the sport included brief scuffles, accompanied by vigorous scoldings. Soon the game moved to another tree, then another, until the players were out of sight.

I waited. Perhaps nature would put on another show. If you sit quietly in the woods and watch, she usually does.

The next act had already started. Glancing through the trees, I saw another large oak. About ten feet up its trunk, and climbing, was a black snake.

When I walked toward him through the crackling leaves, he stopped moving. Most wild creatures do this instinctively. They have learned, through generations of experience, that motion is the great eye catcher. The species that combine this instinct with protective coloration can be almost invisible. Witness the rabbit sitting in dead grass, or the partridge nestled on a bed of brown leaves.

But this snake was not camouflaged. He was outlined in gleaming black against the gray bark. He was about three feet long, middle-sized for his kind. Instead of the graceful undulations often presented by a serpent, his body seemed frozen into a series of irregular bends. Back to him later.

No snake can move really fast. They may seem to, but it's an illusion. When we see one we are usually startled, which affects our sense of time; also, it is nearly always near brush or grass in which it can hide; it disappears quickly, and so seems to move quickly. The best speed of their champions is about as fast as a man can walk.

Considering their lack of limbs, even this seems good. "Upon thy belly shalt thou go," is literal. How fast could we go on just our tummies?

The snake travels by stretching out part of its body, then bringing the rest to catch up. But it isn't a simple case of head, then tail. There is a series of little movements along his entire length. It is done so smoothly that what we see is a continuous graceful gliding. His adaptation for moving is in the scales on his under surface. Each one extends all the way across and overlaps the one before it, forming a series of ratchets. The snake anchors scales number one, three, five and seven, etc., against the surface over which he is going, bringing the second, fourth, sixth and eighth up over them; then holds with two, four, six and eight, advancing the others.

Some snakes go with a sinuous serpentine curving; others in a straight line. The sidewinder rattlesnake has adopted a method all his own; anchoring his front end he brings his tail forward, then advances his head with a thrusting motion, as in striking. Each thrust throws him sideways from the course he is following. Like some people, he has to continually straighten himself out. But he gets there!

Back to Blackie on the tree trunk. The uneven contours of his body were caused by the irregular little island-like blocks of bark over which he was crawling. He had to get his traction where he could.

I tried for his portrait. The result was not good. The slanting afternoon light reflected so sharply from certain angles that in places his gleaming body turned out white instead of black.

I sat down to watch him. How long would it take him to forget, or to accept, my presence?

He made no visible movement. But in about 10 minutes I realized that he was just a bit higher and a little farther around the trunk to my left than he had been before.

Had I dozed? Was I seeing things, only imagining that he had changed position? Or had he really, like the hand of a clock, moved so slowly that the motion was imperceptible?

I noted the exact spot occupied by the tip of his pointer-like tail. It was about an inch from the edge of one of the little blocks of bark. Then I began watching in earnest.

There was still no visible movement of body or tail. Several times he moved his head very slightly sideways, as we shake ours to say "no." I suppose this was to relieve the tension of his cramped situation. But after about five more minutes the tail tip was at the edge of that island of bark.

The kinky appearance of the snake is caused by his gripping the rough tree bark, taking his traction where he finds it.

I was not carrying a watch, so the times given are only estimations. Still, they give a notion. Going by what I call S and S time—sun and stomach— it was over an hour before he disappeared around the trunk.

I gave him about five minutes, then eased around the tree. He was about fifteen feet higher and still going, although he stopped again when he saw me.

I walked away and left him to his own business. It was early May, season of hatching eggs and fledgling birds, so I suppose his errand up the tree was for no good purpose. But he has his own part to play in nature's economy. I try to keep my role to that of observer.

Tree by the Window

By LULA P. GIVENS
Christiansburg

LAST spring while looking from my bedroom window at the wooded lot which adjoins my yard, I saw the small catalpa tree. It was all aglow! Among its bare branches and dried seed pods sat seven cardinals—three males and four females.

Not more than six feet away, they were basking in the sunshine. They preened their feathers and turned their heads to regard each other approvingly.

They seemed content and quietly happy. Why not? The time for mating and nesting was near at hand.

Motionless, I watched them for several minutes as one by one they flew away.

Karl H. Maslowski photo

The tree was aglow with cardinals.

That spring I was often at the window as I watched for another sight of the cardinals. Without really meaning to do so, I began to notice the catalpa and learn more about it.

There are eight or ten species of this flowering tree which are native to eastern Asia. Two of these are found in the southern part of the United States. They are members of a family with the scientific name of Bignoniaceae.

The name Catalpa comes from the Creek Indian word *Kutuhlpa*, which means *head with wings*, an image suggested by the frilled flowers.

The Creeks were one of the Five Civilized Tribes native to Alabama, Georgia, and northern Florida. They were evidently familiar with the tree which grew abundantly in those parts.

The common catalpa is still plentiful in the southern states, and is popular as an ornamental tree in northern cities.

Hardy and quick-growing, it thrives well in cultivation and is often grown for use in cabinet making, and for fence posts, and railroad ties.

This species sometimes reaches a height of 40 feet, but the other American species, which is native to Illinois and its nearby states, may grow to a height of 120 feet.

The one near my house is small. Its diameter is about six inches and its tallest branches perhaps twenty feet high. Compared to the oaks and maples around it, it is definitely a very small tree.

Now that I had become interested in the catalpa tree, I saw others in neighboring yards that had seemingly reached their potential of 40 feet and were almost as symmetrical as the maple.

In early July, the catalpa bloomed in large, loose clusters, white against the tree's luxuriant, heart-shaped leaves. Each single flower, bell-shaped and frilled, resembled the flaring orange and scarlet flowers of its close relative, the trumpet-vine. The blossoms of the catalpa were much smaller. Purple with faint markings of yellow, tinged the throat of each blossom.

After about two weeks some of the flowers began to drop, leaving tiny beans in their place. They seemed crisp and tender like garden beans, and looked "good enough to eat."

The catalpa tree now exemplified the proliferation of nature. It bore at the same time the flowering panicles, the tiny beans from the just-dropped blossoms, and last year's brown bean pods, as well as the tree's ovate, pale-green leaves.

Attracted by the perfumed clusters, ants and other insects crawled in and out of each blossom. The honeybees and the bumblebees zoomed in, and murmured to themselves and each other about the satisfaction of working in a big organization, and the serious business of gathering pollen and nectar.

The catalpa is commonly called the *bean* or *cigar* tree. The long brown seed pods are called Indian cigars by the children.

I have seen very young children dressed in Indian regalia walking with great dignity beside the small tree. Each child gathered a cigar from the low branches to add to his general effect, or perhaps one cigar may serve in lieu of a peace pipe—if the enemy really wants to surrender.

It must be a war party for each brave had been equipped with a knife, a bow, and a supply of arrows. Paint on freckled cheeks and feathered war bonnets on rumpled hair added to the panoply of fierceness which they hoped to convey. Flattened hands smacked small pursed lips to make their whoops more blood curdling. Their tag-along dog barked with appropriate fury. And the birds, frightened, flew from tree to tree.

I laughed at the unchanging ways of childhood, seeing my own in their make-believe.

When this incident was told to my pupils, an older group, one short blond boy told me he had actually smoked the catalpa pods. He had become very nauseated, and to use his words, "turned green in the face." I was familiar with this expression and look, for my brothers and their companions had smoked cornsilk cigarettes on the farm years ago.

Other pupils became interested in the tree, and when they made seed collections for a science display, many posters showed the catalpa pods.

When I opened one of the seedcases which ranged in length from fourteen to twenty inches, it was filled with many winged separate envelopes, having two compartments. Each part contained a tiny round black seed. These winged seed envelopes were loosened and scattered by the wind, when the weather forced the pods apart.

The catalpa had been a late bloomer, and it was a long time before it lost its leaves in the autumn. Neither did they change to the vivid colors of the maple and sumac, nor the duller reds and browns of the oak. Except for a slight tinge of yellow, the leaves changed hardly at all from their light

green color. Rather they seemed to shrivel as though scalded and the edges turned under until the entire leaf had a withered, twisted look.

A dashing cold rain in early November carpeted the ground under the tree with the twisted leaves. The tree was left gaunt and bare except for the slender pods. Drooping in bunches, they hung on through the thick snows and sleets of January and February.

The pods, twigs, and branches made an intricate design against the wintry background as lovely as had been the blooming clusters spreading their fragrance under the July sun.

After its branches were bare, but before the heavy snows, the catalpa had provided me with a moment of great beauty. I saw close against its gray trunk, a small sleek bird about the size of a sparrow. It was black, or very dark-green, or blue. I could not be sure which but, against its body's dark background, white stripes stood out, startlingly. The bird was clinging so close to the tree trunk, it could have been a nuthatch.

It flew away and I went quickly to a window overlooking the direction of its flight hoping to be able to recognize it. Having waited there for several minutes, I was turning away when a whole flock, perhaps a hundred or more, of the small striped birds flew across the backyard.

They were reminiscent of a shower of April raindrops so swift and beautiful had been their appearance and disappearance.

Fellow teachers helped me with the research which identified them as black-and-white warblers; early American ornithologists had called them "black and white creepers." They had evidently stopped to feed in this wooded area on their migratory flight south.

One mild day in December, progress moved onto the uncleared lot in the form of several men equipped with axes and rakes, and another operating a noisy, growling bulldozer.

The elders, growing thickly in the left corner of the lot, were the first to go down. In late August their fruit had hung heavy in large grape-like bunches of purple berries gleaming through a frost-like sheen, although no frost had come as yet.

The bunches, which had been heavy enough in August to pull the shrubs downward, had been lightened before December by the feeding of many birds.

Short work was made of the sumacs, the black wild cherry trees, and the thick undergrowth with its poison ivy and blackberry bushes.

On the actual house site, two towering oaks had to be taken out. When the bulldozer was rammed against their trunks, they were up-rooted and came crashing to the earth with a jarring force . . . their giant beauty prone on the ravaged land.

Other oaks along with several maples were left untouched, and the small catalpa tree, too, since it stood on the edge of the lot.

Perhaps the new owner will want it to remain, and since fast-growth is a characteristic of the catalpa, it may soon stretch skyward and be at least on nodding terms with its magnificent neighbors—the oaks and maples.

No doubt other cardinals in successive springs will come to the catalpa, brightening it with the glow of their warm beauty.

As Tennyson has so poignantly said,

"Love again, song again, nest again, young again."

BREAM BAIT SUPREME

By DOUG CRINER
Arlington

SPRING of 1968 was unusually cool and wet in northern Virginia. It was late May and still the ponds and lakes were producing the small stringers of bluegill more typical of March or early April. Although the weather was providing a legitimate excuse, I knew that only fish could provide me solace. I told Hugh Morrison, one of the most successful bream fishermen in the area, about my lack of fish. His solution for my problem was simply, "Let's go to Burke Lake and try crickets!"

Although I had lived in Virginia for several years and had used crickets a couple of times, they were still a strange bait to me. All my previous bream fishing experience was in the Midwest with worms being virtually the universal bait for pan fish. Until my work caused me to move to Virginia, I had never known anyone who used crickets, nor had I ever heard of live crickets being sold for bait.

I, therefore, was not expecting Hugh to change my affinity for worms and nightcrawlers as bait for bluegill. I was wrong. That Sunday in May produced a long stringer of large bluegill while other fishermen at Burke Lake, in Fairfax County, were having little luck with worms.

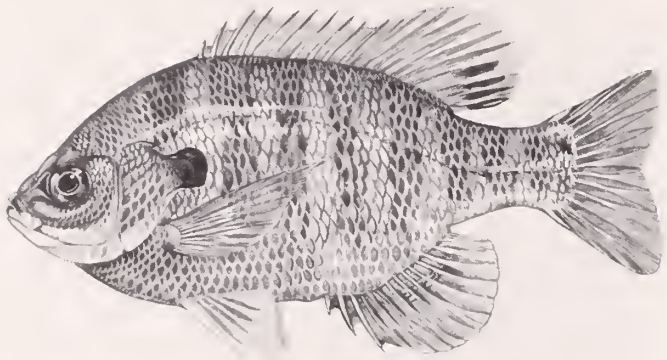
Since my lessons from Hugh, I have become quite a cricket enthusiast myself. I now believe that, when correctly used, crickets are the best bream bait available. In addition to bream, fishing with crickets is also likely to produce bass, crappie, and an occasional catfish.

The first problem you will need to solve before fishing with crickets is, naturally enough, to find a source of crickets. Although dried crickets can be purchased in many tackle stores, live crickets make a much better bait. If you live in an area where crickets are a popular bait, you can probably buy them at most bait shops. A dozen crickets cost about 35¢.

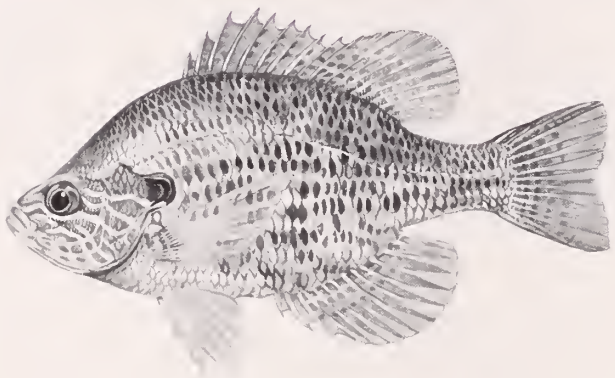
If you find that you cannot buy crickets locally, you can raise them yourself; watch the classified advertisements of the outdoor magazines for more information. Another idea which may occur to you is catching crickets from nature. I haven't tried this myself, but I am afraid that a day's worth of bait might easily take as long to catch.

Grey crickets, the best natural bream bait.

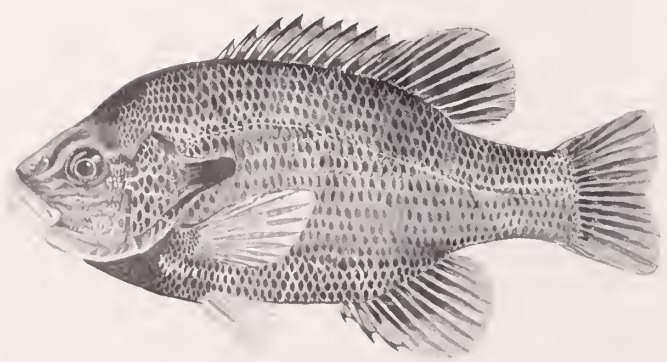
BREAM
(Sunfish)



Bluegill *(Lepomis macrochirus)*



Pumpkinseed *(Eupomotis gibbosus)*



Redbreast sunfish *(Lepomis auritus)* sometimes erroneously called long-ear sunfish.

The crickets that you buy or raise will probably be the grey variety as opposed to the black crickets that seem to be prevalent in nature. The grey crickets (which are called grey crickets but are actually light brown in color) are the ones that I use. However, some people think the strong musty odor of the black crickets makes them an even better bait.

After you have found a source of crickets, you should purchase a cricket box in which to carry your bait. These are sometimes difficult to find; the first place to look is the bait store that sells crickets. For some reason, most tackle stores do not sell them.

The most common cricket box, and the best in my opinion, is not really a box at all. It is a wire mesh cylinder with a large screw-on cap at one end. At the other end is a small opening with a cork plug. The small opening is for shaking out one cricket at a time. This type cricket box costs about a dollar.

A useful modification to such a cricket box is to glue a large cork stopper inside the box. I have learned through bitter experience that this modification is needed to prevent the box from sinking when it is accidentally dropped into the water. This accident is especially likely for me since I often toss my cricket box to other fishermen with whom I am sharing my boat and crickets.

Now let me discuss the actual techniques needed for fishing with crickets. The key is using light tackle. Light tackle is required because, unlike a worm threaded on a hook, a cricket can be easily stolen by the fish. Unless your rig is light enough for you to detect the first strike from the fish, there very likely will be just a bare hook for you to retrieve.

Therefore, use a light spinning rod with light monofilament; I like four pound line although I use six pound line if I expect to get snagged often. Use a very small bobber or float and one piece of split shot about four inches from the hook. The hook should also be small; size ten with a short shank seems to be best. Rather than bother with a leader, tie the hook directly on the line.

Now to put the cricket on the hook. On a cricket's back, just behind its head, is a thing best described as a collar. You must actually look at a cricket to know exactly what I am talking about. At any rate, the proper place to hook a cricket is underneath this collar. A few people prefer to tie the cricket to the hook with thread, although I cannot imagine anyone having enough patience for this—especially when they are in a school of bream that are biting.

To hook a cricket by its collar, hold the cricket's body between the thumb and first finger of one hand. Then, using your other hand, pass the hook underneath the collar starting at the edge of the collar that is closer to the cricket's head. Try to avoid sticking the hook any deeper into the cricket's body than necessary while at the same time keeping the hook completely beneath the collar.

This method of hooking a cricket, while the best in my opinion, is not perfect. Any really strong jolt can result in your cricket flying off the hook. So cast as smoothly as possible and avoid fast retrieves. One worm can often be used to catch several fish; but because a cricket cannot be hooked as securely, it will almost always be lost in the process of catching a fish. Thus, be sure to take several dozen crickets for a day's fishing.

If you find you are getting bites but are not catching fish, your bobber is probably too large. If you use a sufficiently small bobber, the bream will normally take it under water immediately in the first strike. This is your signal to set the hook and reach for your stringer.

KISS A FROG?

By GARY W. WOODWARD, *Senior*
VPI Department of Forestry & Wildlife
Blacksburg

THERE is an old fairy tale about a beautiful young princess who had an unusual experience with a frog. The story goes that the princess was strolling by the local fishing hole when she was startled by a small voice. The voice was that of a frog. The frog, as one may have already guessed, was once a prince and had been changed into his present condition by a witch. The princess learned, after an interesting chat with the frog, that she could change him back into a prince with a simple kiss. She did, after much hesitation, and the frog changed into a handsome young prince whom she married . . . naturally.

This fairy tale portrays a situation similar to that in which wildlife managers, conservationists, and computer people now find themselves. Wildlifers are hesitant to kiss the frog, to overcome the disagreeable appearance and fears of the computer. The princess, or wildlife profession, could transform the frog, or the computer, into a prince—a useful wildlife management tool.

The use of the computer is not a fairy tale. It is used every day in many facets of life. Why should wildlife managers use the computer? Why shouldn't they?!

The computer is nothing more than a machine. It has the same capabilities as man. It can do no more or no less than what it is told to do by man. One must remember that a computer cannot think—it just takes orders.

The time a computer uses to solve problems is nil compared to the time required by man. The cost of computer use is high when looked at on the per hour basis. However, it is very economical when one considers the amount of work done in the hour. Some computers can add 250,000 16-digit numbers in one second! Why should a wildlife manager spend his limited and valuable time tediously working with data when the "magic box" could do it for him with fantastic speed? With this new method, a manager would have more time to collect data and improve the inputs toward his objective.

A computer, unlike humans, has a permanent memory. It can remember *everything* it is told! Data can be fed into the machine, remembered indefinitely, assembled in any desired manner, and used to produce a solution to a problem, hardly stopping to think about what it is doing. Previous management practices, harvest data, and other wildlife information could be stored and recalled with great ease. A system such as this is not a fairy tale. A computerized system for analyzing big game harvests has been proposed for Idaho. Their system of data analysis could assist in setting future harvest regulations by the computer "remembering" what has taken place in the past.

One of the striking attributes of a computer is its ability to handle a large number of variables with accuracy. The computer has the same limitations that man has, but, unlike man, it does not make errors. Any error in an output (for example, a game report) is caused by improper instruction by the operator. The use of hundreds of variables in game management situations could be handled by the computer with great ease. The "human solution" invariably would involve the loss or omission of many of these variables.

The Forest Service is using computers to process data concerning the succession of deer forage or browse. By knowing the succession rate or rate of change in a plant community, size of area, rate of production of browse, and other factors they can calculate the deer carrying capacity of their forest areas. Knowing the carrying capacity would aid the game manager in setting harvest regulations, deciding whether or not to produce more browse, and providing other information for management decisions.

The computer can be utilized in many areas of wildlife management. There are many uses of the machine in wildlife management that parallel or are identical to its present use.

Commission photo by Kesteloo

One cake mix company uses the computer to find optimum nutritional levels for its mixes. Why not create a model of nutritional needs for wildlife, and mix native plants and communities to meet these needs? Maybe such a tool could explain why the deer herd is not as healthy in one area as another—based on the food mix available.

The Navy is using the computer to find optimum search patterns for submarines. Why not use it to find the optimum search and detection patterns for conservation officers in their law enforcement work?

Hospitals are using computers to process and analyze diagnostic measurements for diseases. Why not use the computer to diagnose wildlife disease outbreaks and keep a tab on the general health of wildlife populations?

The possibilities of the computer in wildlife management are unlimited. The "magic box" is fast, accurate, and economical. It is used by many, including the Forest Service, the Navy, and the medical profession, all of whom have gone far beyond the early uses for data tabulation and as a big accounting machine. They use it as a powerful decision-making aid. Why not by the wildlife profession? Why not kiss the frog? There can be a wonderful wedding of the wildlifer and the computer, and the spawn of such a union will be increased public benefits and improved natural resource management.

A BOWL FULL OF SUMMERTIME

By KATHERINE W. MOSELEY
Rixeyville

IT is early dawn of a day late in the summer on our knoll above the Hazel River. Most of the birds are awake but have not left their leafy perches of the night. Somewhere, nearby, there is a dry, rustling, scratching sound as a raccoon scrambles into a tree-den after nocturnal foraging. In a patch of woods the whippoorwill calls for the last time until it is night again.

As if an alarm clock had sounded the crows shout each other awake. A robin sleepily warbles a greeting to the morning and other robins answer. There is a tender, sweet, flute-like whistle from the pine tree. Thrushes, song sparrows, and warblers sing lightly with day-awakening simple melodies.

As the morning opens to the sun the birds fly to the ground and to the berry vines and their songs end. Flycatchers mount to their favorite perches to wait for unwary flying food. A kingbird may sit quietly on a limb or a fence when suddenly he dashes into the air and clicks his broad bill over a winged insect. Summertime is insect time for their moisture demands are low and their activities are the highest at the end of the hot months.

Already the flower garden is aflutter with the flashing

L. L. Rue III photo

Hummingbird and nest.

wings of the ruby-throated hummingbirds who have broken their fasts of the night at the tubes of sugar-water hung for them. They must feed often to replenish the fuel loss of the torpor-filled dark hours. Their frenetic flight and almost constant wing-beat burn fuel quickly and food must be constantly available.

The pileated woodpeckers, also hungry, drill early for larvae in infested river trees. Their hammering is soon over and with shouts of "Whucker" they waver through the air to the deeper forest above the house. Chipmunks glide over the garden rocks but eat little, which decreases their metabolism, in order to better endure the heat in their leaf-lined burrows. A gray bunny peeks out of the brush and slips back into the brambles. Softly furred and feathered creatures must find protection from excessive warmth by seeking cool, airy, and shady places.

The woods, hills, and fields seem hushed and silent as the sun melts the morning. There is little hint of the vast numbers of wildlife finding refuge. Hidden by the lush growth of summer the thickets and forests are alive with new generations of bird and animal life. Here lies the harvest of the spring's matings. Here perch the results of the courting dances, wing displays, and ecstatic songs. Now the responsibilities of the cradle-days are over, the young have been faithfully tended and taught to find food, to hide from enemies, and to face the laws of survival.

Birds wing into the deep, cool shadows of the woods to renew their feathers in a late post-nuptial molt. Mammals retreat to shed hair or fur before growing heavy winter coats. Many animals protect themselves against over-heating by sleep, a dormant state very like hibernation which is called estivation. Lizards and snakes hide during the day in cool spots and underground tunnels. Lizards must eat by open light but are nimble and quick to escape the sun. Toads and land turtles dig shallow troughs in which to sprawl against the cooler earth. Water turtles dig into the mud and fish seek deep pools.

As the summer months run out even the work of the plants slows. The full-time strength of the sun produces flowers of great color intensity, many dependent on insects for fertilization. Now there is little need for pollen-dusted bees. Petals are dropped and seeds scattered. Perhaps in the spring the plants will live again as the foodstuffs have already been stored away to nourish another generation.

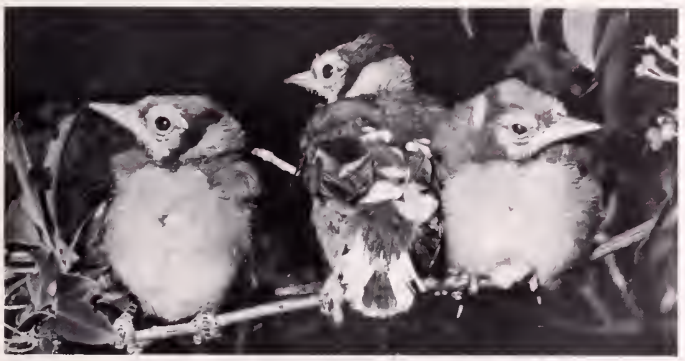
All of late summer life does not hang suspended. Some of the birds of these months are more brilliant with color and sweeter with song. The goldfinches sail in waves over the flower garden to descend on seeding blossoms. They cling to the swaying stalks of marigolds, bachelor buttons, and zinnias and are much more beautiful and animated than the gayest of flowers. Goldfinches nest late; waiting for the fluff of thistles to provide down for their nests so their love-making is prolonged throughout the summer as is their sweet, tender song.

The indigo bunting is seen through the hot months, almost unbelievably vivid, in purplish-blue feathers. His beauty compensates for a mediocre song which lasts throughout his stay. The noontime heat that silences most birds seems to give the little colorful fellow fresh animation. The towhee is seen scratching at mid-day but he sings little and pants more with beak open. The phoebe stays on even the hottest days and bobs its tail and calls its name regardless of temperature. July brings the scarlet tanager of limited song

and gorgeous color. It is said to sing like a robin but the only song we can identify is a soothing murmur to his plain mate on an untidy nest in an oak tree.

When heat waves shimmer and the sultry air seems to stand still, one is aware of the continual resonance of the insects. No insect has a true voice as most of them rub one part of the body against another part to make the characteristic sound. The cicada is the daytime drummer. Its thrumming is made by the males. They are able to contract by muscles the plate-like organs of the thorax. Some species are called harvest flies because of their late summer appearance. The nimble-legged acrobats of the fields are the grasshoppers, thriving in the sunshine. They make their scratchy, rasping sound by rubbing the thick inner part of the hind legs over the edge and stout veins of the forewings. The bees, large and small, are busy buzzing. The bumble bees sink into flowered throats, the wings throbbing a deep bass. Irritable wasps warn, mosquitos whine, and the grass is beetle-busy. Butterflies, on angel wings, have no voices but bring heavenly colors to wherever they rest. We have a rock wall that by chance had one wild butterfly weed take root. By now the wall is almost a blinding dazzle of orange flowers through the late summer and always touched by butterflies of all hues.

As the sundial marks off the hours, the bright sky curves ever downward. The glowing blue bowl with feathery cloud-patterns overhead seems the same but the angle of the sun has shifted and its path on earth is marked with deeper



L. L. Rue III photo

Young blue jays.

shadows. The sweet smell of summer is in the air: ripening fruit with peaches pendant from a laden tree, mellow apples in the making, ripe wild cherries rich and dark to bursting, spicy pinks blended with petunias.

Summer's door is closing but it is not yet time for the birds to gather or make ready for the great adventure of migration. The animals that hibernate feel no need to stuff on food in order to store fat on their bodies for the winter's sleep. The far-sighted food-hoarders wait a little longer to begin to fill their cupboards.

The sun hastens its journey to the west a little faster each day. Now it seems to rush to drop behind Red Oak Mountain dyeing the sky red, yellow, blue, and green, as if, in its hurry, it tipped over paint pots. The Hazel River flowing toward us from the northwest turns into a silken, rosy ribbon.

The birds stir again. The bluebirds and their adolescent young line the telephone wire. The cardinals come to the feeders. Bobwhites call to each other before they sound the rallying cry. The pileated woodpeckers, like commuters, return to the river trees for the night. Crows patrol the air.

We take our supper to the patio and wait for the rabbits who eat grass nightly in the yard. A light breeze rustles the leaves of the trees. The elm leaves crackle, the oak leaves rattle, the mimosa leaves swing like pendulums and the hemlocks whisper. There is a sustained crescendo of sound from the insects. Crickets and katydids tune up for their nightly songs. In the tangle of the perennial sweetpea vines we hear an intermittent bell-like call which we cannot identify but think is the trill of a tree frog.

The hummingbirds feed almost constantly in preparation for the night of no food. The cardinals stay about the yard until it is almost dark.

The guardian light turns itself on three minutes earlier than last night. Around the light flutter the beautiful moths with their tragic, short lifespan. Over them sail the bats. Tiny stars light the night below the sky as fireflies flash their courtship lanterns. The female, recognizing a firefly of her species, gives an answering colorful flick.

The Roman poet, Virgil, wrote, "Steep thyself in a bowl of summertime." Perhaps summer was meant for steeping and cleansing to extract the finest essence of ourselves. We cannot change our feathers and fur but if, in the tranquility of summer, we can let the busy senses quiet, the over-active brain rest, the tense body relax, we can find it a season of renewed strength and a source of courage for the future. It could be a time for dreaming and remembering. Maybe a time for forgetting. Certainly it is a time for appreciation of the arching loveliness of nature with which for a short while we can identify ourselves as one with the bunny in the briar patch, the quail in the fields or the crow against the sky.

Guest Editorial (Continued from page 3)

It has been said that civilization as we know it may be eliminated from this spaceship we call earth principally because of poor communications. Our wildlife is surely in jeopardy because those who have primary responsibility and interest in its welfare are not communicating. Professional wildlifers somehow are not getting the message of habitat importance to the public.

In this case, we have been talking to ourselves.

Far too many people dedicated to the vital issue of preserving wildlife for posterity expend most of their efforts and energies arguing over *who* should have priority or exclusive use of what remains of our wildlife heritage!

Those who consider it evil to hunt wild animals for sport should remember that this is a question of personal philosophy, and there is about as much chance to change a hunter's philosophy as there is to change his religion or politics. It is an undeniable fact that the true sportsman has as much reverence for wildlife as the wildlife "watcher."

But it is a two-way street. In too many instances, when they should be enlisting their help for the difficult conservation battles that lie ahead, hunters expend valuable energies belittling contributions of the 'little old ladies in tennis shoes' who love to hunt wildlife with binoculars or cameras.

A united front is our only hope in conservation of the natural environment and thereby optimum wildlife populations for all to enjoy. Preservation of the natural environment and improved communications to carry the conservation message to that great segment of the public with but a passive interest in nature are the mandatory ingredients of conservation achievement.

Edited by HARRY GILLAM

New Record Striper from Gaston

This 30 pound 11 ounce striper taken from Lake Gaston water immediately below Kerr Dam set a new Virginia State record for landlocked rockfish. The lucky angler was B. F. Hill of Crewe who caught the big fish on a bucktail floated beneath a balloon in the current.

Pair Fined $100 Each for Littering

Two Rockingham County men were fined $100 each in Rockingham County Court recently for tossing empty bottles onto a stream bank. Both men pleaded guilty to charges of littering. One was charged with tossing a soft drink bottle onto a stream bank April 2, and the other with throwing a wine bottle March 16. Both charges were placed by Game Warden Ronald Wilfong.

In another littering charge case, trial for three Bridgewater College students was set during their arraignment. They were charged with throwing beer cans on a river bank.

—ERNEST J. FOLDI
Harrisonburg

Golden Eagle Passports Now on Sale

Golden Eagle Passports, which admit the holder to most federal recreation facilities, are now on sale, for the last time, at federal agency offices and local ASC offices. The permit costs $7 and covers general entrance fees for the holder and the occupants of his auto when traveling through federal facilities. When this year's Golden Eagle Permit expires March 31, 1970, the program will be discontinued in its present form as a result of public law 90-401. This Act guarantees a Land and Water Conservation Fund of $200 million per year supplemented by receipts from offshore oil leases. Next year fees will be collected by and returned to the specific government agency administering the recreation facility.

Several Game Commission facilities, including Wythe and Rockbridge County lakes and the Powhatan and Amelia Wildlife Management Areas, have been funded in part from the Land and Water Conservation Fund. The monies have also been used to help finance state, city and county parks and recreation facilities.

Nice Crappie From Cumberland

John M. Putney, Sr., of Cumberland, caught this 3 pound specimen, one of the best so far this year, from a local farm pond.

Big Brook From Laurel Bed

This 2 pound 7 ounce brook trout was taken by Bill Williams of Williamsburg, Virginia, from newly-opened Laurel Bed Lake on the Clinch Mountain Wildlife Management Area in Southwest Virginia. The lake is operated as part of the fee fishing facility and a $1 daily fishing permit is required in addition to a fishing license.

Spring Trophy

W. C. Pearson of Gainesville, a 72 year old *Virginia Wildlife* subscriber, bagged this nice 17 pound gobbler near his home this spring.

New Gobbler Kill Record Set

The Virginia 1969 spring gobbler kill of 1,373 has exceeded last year's mark by a dozen birds establishing a new record, reports Game Commission Game Management Field Coordinator C. H. Shaffer. Wythe County claimed the highest total kill with 62 gobblers bagged. Other counties with large kills were Augusta with 56, Prince William with 54, Fauquier with 51, Dinwiddie with 48, Bath with 44 and Bland with 43. Most southwest, central mountain and northern Virginia counties yielded good numbers of gobblers.

Mason Neck Refuge Established

An 815 acre area 18 miles south of Washington, D. C., on a peninsula in the Potomac River has been designated as Mason Neck National Wildlife Refuge and will serve as a refuge area for the vanishing southern bald eagle. The refuge includes the only known summer roost for eagles in lower Potomac River Basin and has potential nesting sites. Mason Neck was the early home of famous early American George Mason, who fathered the bill of rights. The area was purchased in 1967 by the Nature Conservancy to protect it from commercial development. The Department of Interior is leasing the lands from the Nature Conservancy until purchase can be completed. The Virginia Division of Parks and the Northern Virginia Regional Park Authority are developing adjacent park facilities.

Edited by ANN PILCHER

A Rather Good Year for John

John Bradberry's dad helps him hold his first turkey—an 18 lb. 3 oz. gobbler, taken with a Savage 12 gauge, #2 magnum load in December at Fort Valley. Shot on the fly after flushing, the bird was hit by only one pellet.

Fifteen-year-old John Bradberry, a 1968-1969 Bishop Ireton High School sophomore who lives near Alexandria, wishes the Game Commission offered citations for large hunting trophies as it does for lunker fish catches. His interest is easily understood, in view of the accompanying photos.

Young Richmonder Wins Skeet Title

Winding up two-day competition against 110 shooters, 14-year-old Billy Hobgood won the 12-gauge, 100-target championship May 4 in the 21st annual Richmond Open Skeet championships at Izaak Walton Park. Earlier in the contest, Billy and his father, Linwood W. Hobgood, a Richmond gunsmith, teamed up to shoot 200 out of a possible 200, tying the world record for father-son shooting. Billy was one of 9 shooters in this competition who broke all 100 targets, finally becoming champion in a 32-target shootoff.

According to Dr. Richard A. Lehew, Richmond IWLA Skeet Committee Chairman, there are approximately 600 competitive skeet shooters in Virginia, about 20 of them in Richmond. Anyone wishing to do some skeet shooting, for fun or competition, is welcome to use the Richmond Izaak Walton Park facilities, where a nominal charge is made for the privilege. The range is open on Wednesday, Saturday and Sunday, from 2:00 p.m. till about dusk.

Above left: An antler found near Gordonsville in Orange County while hunting quail. John has never seen one like it before and wonders if a reader can identify it. Center: These three ringneck pheasant cocks, killed last fall on a Remington shooting preserve, made a very tasty, Thanksgiving dinner. John used a 12-gauge shotgun, not the Civil War antique which he holds here. Right: This nearly 17-pound coon was robbing a bee tree when John took him with a .22 at Flint Hill last November while squirrel hunting.

Below left: Each smallmouth in this rainy morning catch by Mr. Bradberry and John equalled or exceeded Shenandoah's 12" limit, the largest measuring 16". The anglers used Mepps spinners and artificial minnows. Right: Each weighing more than 3½ pounds this 18" largemouth and 15" smallmouth were landed within five minutes of each other from the same hole of the Shenandoah's South Fork near Luray on same plug (artificial minnow).

Heavy Cat

Mike Killebrew of Colonial Heights took this 13-lb. Freshwater Fish Citation channel catfish on spinning rod from the Appomattox River in late April.

Two in One Week

Not citation size but still a good catch, this 17-inch, 3-lb. largemouth fell to Robert Knapp's casting rod on April 27 in Lake Arrowhead, enticed by an artificial worm. Later in the week Robert, of McLean, caught another just like it.

Pleased With Their Carp

Courtesy *Northern Virginia Daily*, Strasburg

Mike Putnam of Toms Brook (center) holds a 30 lb. carp he caught in the Shenandoah River this spring. He was assisted in the catch by Danny Rinker (on left) and Randy Riffey (right), both of Toms Brook. Surpassing Freshwater Fish Citation requirements by 10 lbs., the lunker was taken beneath the swinging bridge at the B. G. Wenger farm, two miles east of Woodstock.

Edited by JIM KERRICK

Virginia to Host Regional Water Ski Tournament

Only a little over one year ago several local citizens teamed up to make a water ski area on a lake in Dinwiddie County. This August 15, 16, 17, this small lake on the Woodstock Game Preserve will be the site for the 1969 Eastern Regional Water Ski Championships, preliminary for the United States National Tournament to be held in Berkeley, California. This group of local citizens, the Virginia Water Ski Team and the Colonial Heights Jaycees, are working together to bring this tournament to Virginia, for it has never before been held south of the Mason-Dixon line.

Governor Mills Godwin has recognized this event by asking Virginians to call special attention to the month of August, designated Water Ski Month in the state. The mayors of the cities of Colonial Heights, Petersburg, and Hopewell have also decided to recognize August as Water Ski Month, and thus help the sponsoring organizations welcome nationally rated skiers from Maine to Virginia who will be competing for national recognition.

Tournament events will include trick skiing, jumping, and slalom riding. Trick skiers will attempt such stunts as one and two ski turns, reverses by stepping over the line, turns holding the rope with the foot, and rotating while skiing over the jump ramp. Jumpers will endeavor to jump distances in excess of 110 feet, while maintaining near perfect form. Slalom skiers will try to ski around buoys arranged in an official American Water Ski Association slalom course, obtaining boat speeds of 36 miles per hour as skiers reach speeds greater than 50 miles per hour. With the excellent water conditions available, many regional and national records will be jeopardized at this event.

The public is cordially invited to this tournament at Picture Lake, located eight miles south of Petersburg on U. S. Highway 1. In addition to the water ski events, the U. S. Army Band will organize a parade in Petersburg to officially recognize the event, and there will be various exhibits at the tournament of interest to spectators. Picture Lake will also be the location of the Eastern Masters Tournament, to be held the weekend prior to the regional event, as well as numerous ski shows, performed by the Virginia Water Ski Team. The weekends of August 9, 10 and 15-17 will feature stiff tournament competition, and September 13 and 14 will be the dates for show entertainment at Picture Lake. Organized water skiing is finally making a big stand in the state, so Virginians now have a golden opportunity to see water skiing at its best.

—STEVE LOHR, *President*
Virginia Water Ski Team

Show entertainment at Picture Lake in September will feature Virginia Ski Team members performing mixed doubles routines.

Joker Osborn of Cypress Gardens, Florida, displays a toe-hold slide, one of the most difficult maneuvers in the trick event.

Precision and timing are key factors for slalom skiers as they round official buoys; a moment's hesitation can easily send the skier for a swim.

Bird of the Month:

Glossy Ibis

By DR. J. J. MURRAY
Lexington

THE glossy ibis is one of the rare water birds in Virginia. In fact, it is quite uncommon anywhere on the Atlantic coast north of Florida. There are a few records for our state. Mr. Clayton Ewell, former assistant at Back Bay Refuge, when shown skins of this bird, stated that he had seen four on Ragged Island early in May 1928, one of which he had killed.

There are old reports of small flocks in spring on the Eastern Shore of Virginia and Maryland. It has straggled even into New England, where there were heavy incursions back in 1850 and in 1878.

As Dr. Alexander Sprunt remarks in *Florida Bird Life*, drainage has deprived this bird of many of its former nesting haunts. However, it still nests commonly in parts of Lake Okeechobee. It has been known to nest in South Carolina and as far up as the vicinity of Southport in southeastern North Carolina.

Its Latin name, *Plegadis falcinellus falcinellus*, refers in all of its three parts to the bill, the first word meaning "scythe," and the other two parts meaning "sickle." The down-curving bill measures around five inches in length.

The glossy ibis is a marsh bird of medium size, somewhat larger than the common green heron and about the length of the little blue heron. Individuals, of course, vary in size. It measures from 22 to 25 inches from tip of bill to end of tail. Herons fly with curving necks and slow wing beats; ibises fly with necks stretched out and wings beating quickly, but sailing between periods of beats.

It is a beautiful bird in shape and in coloring, a dark bronze, appearing black in certain lights. There is in its plumage an iridescent sheen of green, apparent in sunlight. Along the South Carolina coast it is locally known as "black curlew."

This bird nests in colonies in low trees in swamps. At times it even nests in grass clumps on the ground. The three or four eggs are typically 'heron' in color, greenish-blue and unmarked. The young, like the young of all herons and ibises, are ugly, scrawny creatures until they are ready to fly.

In its food habits the glossy ibis is altogether beneficial to human interests. Its food consists of insects, crawfish, tadpoles, small frogs, fish of varieties of little use to man, and occasionally even water moccasins.

THE FOREST IS THEIR

HOME

ARE YOU A CONSIDERATE **GUEST** ?